

Amendments to the Drawings

The attached three sheets of drawings include changes to Figures 2a, 2b, 3a, 3b and 4. No new drawing figures or sheets have been added.

Drawing sheet 1 includes the following requested changes to Fig. 4: number 15 to 5', number 18 to 8'; number 19 to 6'; number 31 to 3'; and extension of conduit 8' through members 4', 5' and 6'.

Drawing sheet 2 includes the following requested changes to Fig. 2a: number 9 to 13, number 14 to 9, number 16 to 14 and a new number 16 which was previously omitted. Requested changes to Fig. 2b include: number 3 to 9, extension of leader line for number 14, and thread detail on element 14.

Drawing sheet 3 includes the following requested changes to Fig. 3a: truncation of leader line for number 12. Requested changes for Fig. 3b include: number 12' to 17, number 17 to 12', and number 21 previously omitted.

REMARKS

In the present application, claims 1-12 are pending. The drawings are objected to. The abstract of the disclosure and the disclosure are objected to. Claims 1-12 are rejected under 35 U.S.C. § 112, paragraphs 1 and 2. Claims 1, 2, 4, 5, and 11 are rejected under 35 U.S.C. § 102(b). Claims 9 and 10 are rejected under 35 U.S.C. § 103. In this amendment, claims 1-12 have been canceled and claims 13-32 have been added. The specification and drawings are amended.

DRAWINGS

The drawings are first objected to as not illustrating the spring retaining ring, threads, and a wrist axis. Drawing Figure 3b has been amended to identify the previously illustrated and disclosed retaining ring 21. See spec. ¶ 0038. Figure 2b has been amended to show the previously disclosed threaded engagement between nipple 13 and mounting plate 12. See spec ¶ 0029. The pending claims have been canceled rendering the objection to the wrist axis moot. Reconsideration is requested.

The drawings are objected to as not including reference numerals 15 and 19. The specification for one embodiment identifies feature 15 as one of the pleaded bellows. See spec. ¶ 0029. Feature 15 was previously identified in Figures 2a and 2b. Feature 19 was previously disclosed as an annular attaching flange. See spec. ¶ 0037. Attaching flange 19 was previously illustrated in Figures 3a and 3b. Reconsideration is requested.

The drawings are objected to as including features 5', 6' and 8' asserted to not be mentioned in the description. The specification identifies 5' and 6' as members of the wrist axis 3'. See spec. ¶ 0040. In a first embodiment, feature 8 was previously identified in the specification as a conduit and illustrated in Fig. 1. See spec. ¶¶ 0006, 0007, 0025. In the second embodiment shown in Figures 3a and 3b, feature 8' was originally noted, but was not clearly identified as an alternate conduit, see ¶ 0040, and erroneously identified as feature 18 in original Figure 4. Paragraph 0040 has been amended to clarify the identification of conduit 8'. Figure 4 has been amended to correct the reference numbers and conduit 8' to be consistent with the specification and remaining figures. See spec. ¶¶ 0006, 0007, 0025, 0040 and Fig. 1.

The drawings are objected to as having several errors in the numbering of illustrated features. Number references 3, 9, 12, 14, 15, 16, 17, 18, 19, 31, 3', 5' and 8' in Figures 2a, 2b, 3a, 3b and 4 have been amended to be consistent with the specification and original figures.

SPECIFICATION

The abstract of the disclosure is objected to as including a reference to Figure 2a. The Examiner is referred to the Preliminary Amendment filed with the initial application January 30, 2004 removing that reference. The asserted reference to Figure 2a was not included in the November 25, 2004 published application.

The disclosure is objected to for a typographical error in ¶ 0033 line 6. Paragraph 0033 has been amended. Reconsideration is requested.

CLAIMS

Claims 1-12 are rejected under 35 U.S.C. § 112, first paragraph, for lack of an enabling disclosure for a conduit having a line that is spiral or winding and a conduit. This conclusion is traversed as original Figures 1 and 4 show a conduit 8 positioned inside of the wrist members and the helical or wrapped lines 22 passing through the wrist members 4, 5, 6. See also spec. ¶ 0007. Claims 1-12 are also asserted to be non-enabling for wrapped lines carried by a bellows. Claims 1-12 have been cancelled and new claims 13-32 added which further clarify the claimed invention and which are asserted to be allowable. The Examiner is further referred to paragraph 0034 disclosing use of an annular spring used to press the bellows against the guide plate.

Claims 1-12 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1-12 have been canceled and claims 13-32 added which further clarify the claimed invention and are asserted to be allowable.

Claims 1, 2, 4, 5, and 11 are rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,632,632 to Simone. Simone discloses a programmable industrial robot asserted by the Examiner to included a movable member (5, 6) having a

conduit (inside 5, 6), housing a winding line (39) carried by an axially compliant bellow (10) and an unnumbered guide plate.

Claims 1-12 have been canceled and claims 13-32 added. Neither Simone nor the cited references of record disclose the structural features and relationships as presently claimed. Simone does not disclose a conduit positioned inside a rotatable wrist having helical or wrapped lines as claimed in claim 13. The wrist described and illustrated as gripper 7 in Simone has the lines positioned exterior to the gripper 7. See Simone Figs. 1 and 2. Simone further does not disclose a bellows that is attached to a mounting plate and the line. Simone's asserted bellows is disclosed as a mere cover for the horizontal and vertical slides. Simone col. 3 ll. 33-36. There is no disclosure that Simone's bellows directly or sealingly engage a mounting plate or the line. Simone further does not disclose the conduit and helical-oriented line in combination with a bellows as claimed in claims 26 and 32.

Claims 9 and 10 are rejected under 35 U.S.C. § 103(a) as being obvious in view of the Simone patent. As new claims 24 and 25 are similar to original claims 9 and 10, Applicant generally traverses the rejections as not meeting the Examiner's burden of establishing a prima facie case of obviousness supporting a § 103(a) rejection and assertion of common knowledge without documentary support. See M.P.E.P. 2144.03. The Examiner's summary conclusion on claim 9 of known materials would render any claim to suitable materials obvious in view of prior art. The cited reference provides no teaching or suggestion of suitable materials or axial extension capabilities of the claimed bellows in the claimed invention.

Claims 13-32 have been added and are asserted to not be anticipated or rendered obvious by the references of record and are in a condition for allowance.

Reconsideration of the application as amended is requested. It is submitted that this Amendment places the application in suitable condition for allowance, notice of which is requested.

If the Examiner feels that prosecution of the present application can be expedited by way of an Examiner's Amendment, the Examiner is invited to contact

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Applicant's attorney at the telephone number listed below.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'C. Garascia', with a long horizontal flourish extending to the right.

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